

Water Quality Standards Advisory Committee

MEETING MINUTES

Thursday, December 9, 2010 1:30 pm – 3:30 pm

Department of Environmental Services

Rooms 112/113/114

29 Hazen Drive, Concord, NH

WQSAC Members Present

Name	Representing	Present	Alternate Present
Dan Blais	Home Builders and Remodelers' Association of NH		
Malcolm Butler	Water Council		
Steve Clifton	Consulting Engineers of NH		
Josh Cline	NH Rivers Council		
Sam Demeritt	NH Wildlife Federation	Y	
Diane Hanley	NH Association of Conservation Commissions and Lakes Management Advisory Committee	Y	
Donna Hanscom	NH Water Pollution Control Association		
John Hodsdon	NH Farm Bureau Federation	Y	
Melissa Hoffer	Conservation Law Foundation		
Kenneth Kimball	Appalachian Mountain Club		
Tracy Lachance	Business and Industry Association	Y	
John Magee	NH Fish & Game Department	Y	
William McDowell	University of New Hampshire		
Mike Metcalf	NH Water Works Association	Y	
Eileen Miller	NH Association of Conservation Districts	Y	
Larry Morse	NH Association of Natural Resource Scientists	Y	
Allan Palmer	Rivers Management Advisory Committee	Y	
Kenneth Rhodes	Associated General Contractors of NH	Y	
Peter Rice	NH Municipal Association		
Keith Robinson	US Geological Survey		
Dari Sassan	Office of State Planning		
William Schroeder	NH Lakes Association	Y	
Jasen Stock	NH Timberland Owners Association	Y	
John Warner	US Fish & Wildlife Service		
Ellen Weitzler	EPA Region I		

Additional Meeting Attendees

Jim Fitch (Woodard & Curran)
Mark Hutchins (Normandeau Assoc.)
Bill Arcieri (Vanassee Hangen Brustlin, Inc.)
Jason Smith (NH Fish and Game)
David Brennan (Concord Water Supply)
Rep. Jim McClammer (NH House)
Rep. Judith Spang (NH House)
Justin Richardson (Upton & Hatfield)

Philip Trowbridge (DES)
Paul Currier (DES)
Collis Adams (DES)
Lisa Fortier (DES)
Jody Connor (DES)
Steve Roy (DES)
Shane Csiki (NHGS)

1) Introductions

The meeting began with a round of introductions. All of the WQSAC members received a handbook with federal and state statutes, regulations, and guidance related to water quality standards.

2) Approval of the 10/14/2010 Meeting Minutes

Bill Schroeder asked for the following statement to be added to the minutes of the 10/14/10 meeting:

“There is a proposal that antidegradation review would only be required for water transfers that degrade the sending or receiving water bodies. WQSAC has been over this many times before. Always we have been assured that a full antidegradation review and a full public discussion would take place before a water transfer could be approved. NH Lakes believes that a full antidegradation review should always be required. Our concern is that someone proposing a transfer has a strong incentive to minimize the risks and harms that would result. Those who might be opposed should be given the full opportunity to expose those risks and harms. That's what a full antidegradation review should accomplish.”

A motion to approve the minutes, as amended, was made by Diane Hanley and seconded by Sam Demeritt. The motion passed without opposition.

3) Update on HB 1305 and Env-Wq 1708 rule changes

Phil Trowbridge reported that DES would not be going forward with HB1305 next year. DES will have lots of activity with the new legislature and does not want to take on additional legislative commitments. However, the work of the WQSAC to craft HB 1305 was still useful to clarify the definitions in the water quality standards and to initiate a broader review of the standards. DES still wants the WQSAC to investigate an overhaul of the water quality standards. Bill Schroeder requested that DES should notify the WQSAC if the department needs support for other bills related to water quality.

Phil also reported that the rulemaking proposal for Env-Wq 1708 was moving forward and would be reviewed by the Water Council in February 2011. The WQSAC had some comments.

- The proposed first sentence in Env-Wq 1708.10 is unclear: “For any proposed new or increased discharge or other activity would that is not determined to result in an insignificant impact to the existing water quality...” Does this mean that all new or increased discharges will have to undergo antidegradation review? All agreed that antidegradation would only apply to new or modified activities with significant impacts as determined in Env-Wq 1708.09. The group arrived at the following alternative text: “For any new or modified activity that is not determined to result in an insignificant impact to the existing water quality...” DES will review this language with Legal staff prior to the Water Council meeting.
- The proposed criterion in Env-Wq 1708.10(a)(3) says that the economic benefits of the activity must outweigh the environmental harm. How exactly will this be done? Will environmental harm be converted to dollar value? Will the project not be approved by

DES if the cost of the environmental harm is greater than the economic benefits? Estimating the cost of environmental harm is subjective and difficult to do with accuracy. Some suggested using the “least environmental damaging practicable alternative” approach from the Clean Water Act Section 404(b)(1). DES agreed to look into the definition of “outweigh” and the Section 404(b)(1) guidelines to see if the language should be clarified prior to the Water Council meeting (see Notes 1 and 2 in Appendix).

- In Env-Wq 1708.10(g), it states that the Department will make a determination. Will the applicant have an opportunity to review and comment on the DES decision? DES reported that the applicant would have due process rights to appeal the DES decision for any Water Quality Certification to the Water Council per Env-WC 203. As a matter of practice, DES works with applicants during the application process to resolve small issues prior to a final decision. For example, DES will usually send a courtesy draft of the Water Quality Certification to the applicant for informal comment prior to issuance of the formal draft for public comment. The applicant can submit more comments on the draft that is officially released for public comment. After the public comment period ends, DES may consult with the applicant more before finalizing the Water Quality Certification.
- In Env-Wq 1708.10(b), the geographic scope for the economic benefits is limited to the municipality in which the water body is located and the towns that abut that municipality. This geographic scope seems small. What if a regional hospital is being built which will benefit the community in a larger area? Also, it is not clear what geographic extent should be used for the water body. What about a river or a water body that crosses state lines? The geographic extent for economic modeling was taken from Pennsylvania’s antidegradation regulations. DES stated that any application would start with a concise definition of the affected water bodies in terms of assessment units. This list of assessment units would be used to determine the municipalities to be included in economic modeling. DES agreed to research the federal regulations for a justification for the geographic scope of the economic modeling prior to the Water Council meeting (see Note 3 in Appendix).

4) Presentation on the history of water quality standards in New Hampshire and the United States

Paul Currier from DES gave a presentation on the history and scope of the water quality standards. This presentation and any reference documents from the handbook that are not already linked will be posted on the DES website.

5) Brainstorming session on the strengths and weaknesses of New Hampshire’s current water quality standards

Phil Trowbridge started the brainstorming session by reading some of the feedback he has received from DES staff regarding the water quality standards. The feedback was relative to three questions (summarized below):

What components of the NH's current surface water quality standards do you feel are effective tools for maintaining or restoring water quality to support designated uses?

- Numeric criteria. These criteria are easily interpreted and communicated for short-term advisories and long-term trends (as reported by 305b assessments).

What components of the NH's current surface water quality standards do you feel are ineffective, ambiguous, or not practical to implement?

- Narrative standards. These standards are hard to interpret and enforce.
- Antidegradation. This component of the WQS has the potential to be very effective but the process needs to be streamlined to become practicable.
- The definition of “naturally occurring conditions” in Env-Wq 1702.29. How can we know what conditions would “exist in the absence of human influences”?
- There is no linkage between the classification system and designated uses, which is confusing.
- The standards do not provide an enhanced level of protection for drinking water sources, since the notion that all contaminants can be removed through treatment implies that even low-quality waters continue to support the designated use of drinking water after adequate treatment.

The current list of designated uses for NH waters is: primary contact recreation, secondary contact recreation, aquatic life, fish consumption, shellfishing, drinking water, and wildlife. What other designated uses should be considered?

- Geomorphic integrity

In response to these same questions, the WQSAC provided the following input:

- There should be a broader list of designated uses.
- There should be a way to resolve water quality impairments that cannot be fixed, e.g., water quality impairments due to atmospheric deposition.
- Change the definition of “naturally occurring” to be more realistic.
- Need to do away with classification systems except by water body type.
- Designated uses should be different for different types of water bodies. The list of designated uses for wetlands should reflect the functions and values of wetlands (e.g., sediment and toxic contaminant removal, flood control).
- Water quality standards for lakes, rivers, and estuaries should be different than for wetlands. The existing water quality standards were devised for lakes, rivers, and estuaries. We are trying to apply these standards to wetlands and it does not work.
- It is a problem that the level of protection for Class A water bodies is not consistent across the state. Some Class A water bodies have no human activity in the watershed. Others allow boating and other activities.
- Designated uses should not be entirely focused on what humans want from a water body. This could be abused to be convenient for residents while not protecting the resource.
- The water quality standards should not create incentives for counter-productive actions. For example, one of the functions of wetlands is to treat stormwater; however, stormwater cannot be discharged to a wetland...

- Rather than scrapping the Class A/B system, an alternative would be to have the classification reflect how many of the designated for that water body are “natural”.
- The current system of Class A/B waters does a good job of communicating to the public which waters have better quality and protection.
- The challenge with ranking water bodies is establishing a hierarchy of uses. This is not possible. Just within the fishing designated use, there are dozens of sub classes (cold water, warm water fisheries). It is not possible to say which of these sub classes is better.
- It might be best to start by populating a list of designated uses and then look back at the list to see if any can be lumped together into a “class”.
- The water quality standards need to be effective for incremental development. Large projects get some review but most development is lot by lot. Need a way to influence development to promote LID techniques.

6) Define next steps and establish subcommittees

It was agreed that subcommittee should be formed to meet more frequently on this topic. Many of the committee members expressed interest. DES will send an email to the group asking for interested parties. The group will start by generating a list of potential designated uses for New Hampshire. The next step will be trying to determine which of these designated uses would be applicable to each water body type (e.g., river, lake, estuary, wetland).

7) Other Business

Not discussed.

8) Adjourn

The meeting was adjourned at 3:45 pm

Appendix

Note 1: Research regarding Env-Wq 1708.10(a)(3)

The definition of “outweigh” from the Merriam Webster dictionary is: “To exceed in weight, value, or importance (e.g., ‘the advantages outweigh the disadvantages’).” This definition provides flexibility because the decision can be made on importance, not just a straight dollar-to-dollars comparison of value. The federal regulation only requires that the economic and social benefit be “important” in the area where the waters are located. Presumably, the economic or social benefit would not be important if the disadvantages outweighed the advantages. DES and EPA do not support the conversion of all environmental harm to a dollar value because accurate methods for this conversion do not exist. Based on this research, DES does not intend to change section Env-Wq 1708.10(a)(3) in the rulemaking proposal.

Note 2: Research regarding the “least environmentally damaging practicable alternative” standard

The language in the federal wetlands regulations that introduces the “least environmentally damaging alternative” is:

“Except as provided under section 404(b)(2), no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences.”[40 CFR 230 10(a)].

The current rulemaking proposal requires an alternatives analysis of all “reasonable” alternatives. This term could be ambiguous. For example, what might be reasonable for an engineer might not be deemed reasonable to a homeowner. If the word “reasonable” were replaced with “practicable” in section (c), the alternatives would be selected based on technologies that could be put into practice successfully. This standard is clearer. The rulemaking proposal will be changed accordingly.

Another issue is clarifying which alternative being evaluated. Currently, the applicant will put forward a proposal, identify alternatives, and then quantify social and economic benefits and environmental impacts for all alternatives. DES reviews this information and approves the request. However, it is not clear which alternative should be included in the request: The original proposal or the least environmentally damaging practicable alternative? There was discussion in the WQSAC about not necessarily choosing the lowest impact alternative if there was a much bigger economic benefit for another alternative. It would be clearer if the rule specified that the applicant should submit their preferred alternative along with the alternatives analysis. DES would then approve or deny the request. The text in section (b) will be modified to make this clearer.

Note 3: Research regarding Env-Wq 1708.10(b)

The geographic area used by Pennsylvania DEP for economic impact assessments is the “county or counties in which the HQ waters are located plus all contiguous counties”. However, PA DEP allows for the applicant to make the case that the area should be larger or smaller. In the DES rulemaking proposal, the area for economic impact assessments would be the “municipality or municipalities in which the water body is located and all municipalities that abut those municipalities”. There are only 76 counties in Pennsylvania. New Hampshire has 234 incorporated municipalities and is much smaller than Pennsylvania (9,000 vs. 46,000 square miles). Therefore, the DES proposal covers a much smaller area than the Pennsylvania regulations.

Federal language from 40 CFR 131.12(a)(2) states that antidegradation reviews need to consider “important economic or social development in the area in which the waters are located.” According to EPA, the intent behind this language was that the economic benefit should occur within the community that is affected by the water quality degradation. For example, the economic benefit to workers who live outside the affected watershed (or the state as a whole) is not as important as the economic benefit to those people living near the water body whose remaining assimilative water quality capacity is being used up.

The [EPA Interim Economic Guidance Workbook](#) allows for flexibility in determining the geographic extent of the economic modeling (See section 5.3a):

“One important factor is defining the geographical area in which the impacts will occur. In the case of municipal pollution control projects, the affected community is most often the immediate municipality. The relevant geographic area for evaluating the importance of a private-sector development varies with each situation. The area will typically be determined by the area in which the majority of its workers live and where most of the businesses that depend on it are located. In either case, the geographical area considered must include ‘...the area in which the waters are located.’ (40 CFR 131.12 (a)(2)) There are no simple rules for defining the relevant area or community; the decision is based on the judgement of the applicant and state, subject to EPA review.”

Based on this research, DES agrees that some flexibility should be added to the rulemaking proposal but that the default area for social and economic development assessments should be small. The last two sentences of Env-Wq 1708.10(b) could be changed to:

“For purposes of the social and economic development analysis in (d), below, the area where the water body is located shall be the municipality or municipalities in which the water body is actually located and, if relevant, some or all of the municipalities that abut those municipalities. If approved by the department in order to fully quantify the social and economic benefits of the activity in the vicinity of the water body, the area may be expanded by adding some or all of the municipalities that abut the municipalities that abut the municipalities in which the water body is actually located.”